

WHAT IS CLAIMED IS:

1. An inbred cantaloupe seed designated Inbred 442 wherein a sample of said seed has been deposited under ATCC Accession No. \_\_\_\_\_.
2. A cantaloupe plant, or parts thereof, produced by growing the seed of claim 1.
3. Pollen of the plant of claim 2.
4. An ovule or ovules of the plant of claim 2.
5. A cantaloupe plant, or parts thereof, having all of the physiological and morphological characteristics of the cantaloupe plant of claim 2.
6. The cantaloupe plant of claim 2, wherein said plant is male sterile.
7. A tissue culture of regenerable cells of a cantaloupe plant of claim 2.
8. The tissue culture of claim 7, selected from the group of protoplast and calli wherein the regenerable cells are derived from embryos, protoplasts, meristematic cells, callus, pollen, leaves, anthers, stems, petioles, roots, root tips, fruits, seeds, flowers, cotyledons, hypocotyls
9. A cantaloupe plant regenerated from the tissue culture of claim 7, capable of expressing all the morphological and physiological characteristics of inbred cantaloupe line Inbred 442, representative seeds having been deposited under ATCC number \_\_\_\_\_.
10. A method for producing a hybrid cantaloupe seed comprising crossing a first inbred parent cantaloupe plant with a second inbred parent cantaloupe plant and harvesting the resultant hybrid cantaloupe seed, wherein said first or second parent cantaloupe plant is the cantaloupe plant of claim 2.
11. A hybrid cantaloupe seed produced by the method of claim 10.
12. A hybrid cantaloupe plant, or parts thereof, produced by growing said hybrid cantaloupe seed of claim 11.
13. Cantaloupe seed produced by growing said hybrid cantaloupe plant of claim 12 and harvesting the resultant seed.
14. A method for producing a hybrid cantaloupe seed comprising crossing an inbred plant according to claim 2 with another, different cantaloupe plant.
15. A hybrid cantaloupe seed produced by the method of claim 14.

16. A hybrid cantaloupe plant, or its parts, produced by growing said hybrid cantaloupe seed of claim 15.

17. Cantaloupe seed produced from said hybrid cantaloupe plant of claim 16.

18. A method for producing a Inbred 442 -derived cantaloupe plant, comprising:

a) crossing inbred cantaloupe line Inbred 442, a sample of seed of said line having been deposited under ATCC accession number \_\_\_\_\_, with a second cantaloupe plant to yield progeny cantaloupe seed;

b) growing said progeny cantaloupe seed, under plant growth conditions, to yield said Inbred 442 -derived cantaloupe plant.

19. A Inbred 442 -derived cantaloupe plant, or parts thereof, produced by the method of claim 18, said Inbred 442 - derived cantaloupe plant expressing a combination of at least two Inbred 442 traits selected from the group consisting of: a maturity of 84 to 91 days, adapted to southern and southwestern region of the US as well as Latin America, small fruit size, round shape, small abscission zone, very small cavity, medium coarse netting, small blossom scar, high yield, extended harvest, high level of soluble solids, tolerant to powdery mildew, tolerant to "doradia" and tolerant to sulfur application.

20. The method of claim 18, further comprising:

c) crossing said Inbred 442 -derived cantaloupe plant with itself or another cantaloupe plant to yield additional Inbred 442 -derived progeny cantaloupe seed;

d) growing said progeny cantaloupe seed of step (c) under plant growth conditions, to yield additional Inbred 442 -derived cantaloupe plants;

e) repeating the crossing and growing steps of (c) and (d) from 0 to 7 times to generate a further Inbred 442 -derived cantaloupe plants.

21. An Inbred 442 -derived cantaloupe plant, or parts thereof, produced by the method of claim 20, said Inbred 442 - derived cantaloupe plant expressing a combination of at least two Inbred 442 traits selected from the group consisting of: a maturity of 84 to 91 days, adapted to southern and southwestern region of the US as well as Latin America, small fruit size, round shape, small abscission

zone, very small cavity, medium coarse netting, small blossom scar, high yield, extended harvest, high level of soluble solids, tolerant to powdery mildew, tolerant to "doradia" and tolerant to sulfur application.

22. The method of claim 18, still further comprising utilizing plant tissue culture methods to derive progeny of said Inbred 442 -derived cantaloupe plant.

23. The further Inbred 442 -derived cantaloupe plant, or parts thereof, produced by the method of claim 22, said Inbred 442 - derived cantaloupe plant expressing a combination of at least two Inbred 442 traits selected from the group consisting of: a maturity of 84 to 91 days, adapted to southern and southwestern region of the US as well as Latin America, small fruit size, round shape, small abscission zone, very small cavity, medium coarse netting, small blossom scar, high yield, extended harvest, high level of soluble solids, tolerant to powdery mildew, tolerant to "doradia" and tolerant to sulfur application.

24. The cantaloupe plant, or parts thereof, of claim 2, wherein the plant or parts thereof have been transformed so that its genetic material contains one or more transgenes operably linked to one or more regulatory elements.

25. A method for producing a cantaloupe plant that contains in its genetic material one or more transgenes, comprising crossing the cantaloupe plant of claim 24 with either a second plant of another cantaloupe line, or a non-transformed cantaloupe plant of the line Inbred 442, so that the genetic material of the progeny that result from the cross contains the transgene(s) operably linked to a regulatory element.

26. Cantaloupe plant, or parts thereof, produced by the method of claim 25.

27. A method for developing a cantaloupe plant in a cantaloupe plant breeding program using plant breeding techniques which include employing a cantaloupe plant, or its parts, as a source of plant breeding material comprising: obtaining the cantaloupe plant, or its parts, of claim 2 as a source of said breeding material and wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length

polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

28. A cantaloupe plant, or parts thereof, produced by the method of claim 27, said cantaloupe plant expressing a combination of at least two Inbred 442 traits selected from the group of: a maturity of 84 to 91 days, adapted to southern and southwestern region of the US as well as Latin America, small fruit size, round shape, small abscission zone, very small cavity, medium coarse netting, small blossom scar, high yield, extended harvest, high level of soluble solids, tolerant to powdery mildew, tolerant to "doradia" and tolerant to sulfur application.

29. The cantaloupe plant of claim 5, further comprising a single gene conversion.

30. The single gene conversion cantaloupe plant of claim 29, wherein the gene is selected from the group consisting of: a transgene, a dominant allele, and a recessive allele.

32. The single gene conversion cantaloupe plant of claim 30, wherein the gene confers a characteristic selected from the group consisting of: herbicide resistance, insect resistance, resistance to bacterial, fungal, or viral disease, male sterility, and improved nutritional quality.

33. A cantaloupe plant, or parts thereof, wherein at least one ancestor of said cantaloupe plant is the cantaloupe plant of claim 2, said cantaloupe plant expressing a combination of at least two Inbred 442 traits selected from the group consisting of: a maturity of 84 to 91 days, adapted to southern and southwestern region of the US as well as Latin America, small fruit size, round shape, small abscission zone, very small cavity, medium coarse netting, small blossom scar, high yield, extended harvest, high level of soluble solids, tolerant to powdery mildew, tolerant to "doradia" and tolerant to sulfur application.